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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,049	06/04/2002	Gunter Ritter	6235-16=DCL	6718
23552	7590	05/09/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			WARE, DEBORAH K	
			ART UNIT	PAPER NUMBER
			1651	
DATE MAILED: 05/09/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,049

Applicant(s)

RITTER

Examiner

Deborah K. Ware

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1651

DETAILED ACTION

Claims 19-36 are presented for reconsideration on the merits.

Response to Amendment

The amendment and supplemental amendment filed January 5, 2005 and January 19, 2005, respectively, have been received and entered. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 19-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 296 17 181 in view of DE 197 04 953, DE 195 33 994, CENTRUM and JP-61-96959, all cited on enclosed PTO-1449 Form.

Art Unit: 1651

Claims are drawn to process for improvement of water quality by adding various substances, such as calcium salts of an organic carboxylic acid, water-soluble N-free compound, alkali metal or earth metal salt, a decomposable compound. Further, a kit and product thereof are claimed.

DE 296 17 181 teaches addition of magnesium salts, and effects thereof, for which to increase hardness, etc. Also adjustment of the Ca:Mg balance and pH stability are disclosed, note page 11, all lines. Advantages are also disclosed with respect to the magnesium salt of an organic carboxylic acid.

DE 197 04 953 also describe adjustment of the Ca:Mg balance and pH stability are disclosed, note column 1, lines 64-68 and column 5, lines 26-34. Advantages are also disclosed with respect to the magnesium salt of an organic carboxylic acid.

DE 195 33 994 teaches selection of specific substances, citrate, etc, for which one may add thereto.

CENTRUM as cited on enclosed PTO-1449 Form discloses a product characterized in that it comprises *calcium*, iron fumarate, lactose, earth metal salt, magnesium stearate and vitamins B1, B2, B6 and B12, and folic acid. See the entire document.

JP-61-96959 teaches a composition comprising iron citrate, citric acid, metal salt, calcium phosphite and thiamine, and folic acid, the composition is useful for improving water quality for solutions used in fish breeding. Note the abstract.

Art Unit: 1651

The claims differ from '181 in that the Ca-Mg balance and pH stability as well as other specific combination of substances are not disclosed.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine the cited prior art references noted above to provide for the process of improving water quality, and kit as well as product therefore. The art clearly recognizes combination of substances to combat water quality issues. To modify the cited references is clearly obvious because the ingredients as claimed herein are also disclosed by the cited prior art to be useful for treating water. The effects and properties of the ingredients would have been expected to provide for successful results upon the use for water treatment. The product and kit, therefore, are clearly an obvious modification of adding the varied ingredients for improving water quality as taught by the cited prior art.

Phosphate concentrate, for example, would have been expected to be lowered by adding other elements of which would promote a decrease in phosphate. When you add more of one substance over another over a period of time, there is an expectation that the substance you add will be in higher amounts than the one you have not added. Thus, to select for an element for which to lower an amount of is within the skill of an ordinary artisan.

Lowering nitrate concentration and increasing hardness, and increasing carbon dioxide are all properties that can be manipulated by the addition or deletion thereof to a water environment over time. To select for specific amounts for which to add for a lowering and/or increasing is again noted to be a matter of judicious selection and

Art Unit: 1651

within the skill of an artisan. Further, to vary the amounts, therefore, is also within and skill of the artisan. Thus, one of skill would have been motivated to select for these combinations of ingredients in the amounts and concentrations as set forth in the claims. In the absence of persuasive evidence to the contrary the claims are rendered *prima facie* obvious.

Response to Arguments

Applicant's arguments filed January 5, 2005 and January 19, 2005, respectively, have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., addition of chemicals without distributing the precipitation in aquarium-water and skin contact with aquatic animals, as well as filter material and use in aerobic areas of a fish tank and using the metabolism of microorganisms to form waste which is removable from the biological system) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regard to reference, DE '181, In response to applicant's argument that the reference does not teach suitability of the organic salts for water treatment, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). With respect to DE '953 and DE '994, the argument that the references do

Art Unit: 1651

not describe the same interaction because of the lacking of filtering units but the claims do not require any filtering units per se. Also the same compounds can have different uses and still be expected to function the same because of their functional equivalency of which is recognized in the prior art. Further, the argument that CENTRUM is not prior art is noted, however, the reference clearly teaches magnesium and calcium as well. Thus, while Eisen-II-fumarat may not be of trivalent form, the reference also discloses Calcium in its divalent form.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

All claims fail to be patentably distinguishable over the state of the art discussed above. Therefore, the claims are properly rejected and deemed to be prima facie obvious over the cited prior art.

Art Unit: 1651

No claims are allowed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Deborah K. Ware
April 30, 2005



DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 1651